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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,686	10/22/2003	Rama K.T. Akkiraju	GB920030072US1	6118
48915 7590 07/23/2009 CANTOR COLBURN LLP-IBM YORKTOWN 20 Church Street 22nd Floor Hartford, CT 06103				
EXAMINER				
WINTER, JOHN M				
ART UNIT		PAPER NUMBER		
3685				
NOTIFICATION DATE		DELIVERY MODE		
07/23/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

# Office Action Summary

**Application No.**

10/690,686

**Applicant(s)**

AKKIRAJU ET AL.

**Examiner**

JOHN M. WINTER

**Art Unit**

3685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4, 5 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 5 and 29-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgements***

1. The Applicant's amendment filed on March 31, 2009 is acknowledged, Claims 1-2, 4, 5 and 29-34 remain pending.

### ***Response to Arguments***

2. The Applicants arguments filed on March 31, 2009 have been fully considered.

The Examiner states that a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008), in the present case the claimed process is not sufficiently tie to a specific apparatus to overcome the 101 rejection..

3. The Applicants respectfully submit that a selected external matching service that is itself, an external published search engine independent of the UDDI registry's internal search engine describes a property of the selection step of the claimed method, and as such, should be given patentable weight.
4. The Examiner states that the language that Applicant considers lacking from the prior art reference "selecting from a plurality of external matching services an external matching service which, itself, comprises an external, published search engine independent of a search engine internal to the UDDI registry, the published search engine comparing the service requirements and service capabilities through semantic cues in the UDDI request, wherein each external matching service is accessed through an interface defined in an

interface tModel;" is largely directed towards a description of the external search engine, the Examiner submits that this particular language does not serve as a limitation on the claim. In other **words language that is not functionally interrelated with useful acts, structure, or properties of the claimed invention will not serve as a limitation**. See in re Gulak, 217 USPQ 401 (CAFC 1983), *ex parte Carver*, 227 USPQ 465 (BdPatApp& Int 1985) and *in re Lowry*, 32 USPQ2d 1031 (CAFC 1994) where language provided certain limitations because of specific relationships required by the claims. The Examiner submits that the feature of "selecting from a plurality of external matching services an external matching service" is disclosed by the prior art reference Flete her et al (Column 7, lines 15-54).

5. The newly added language of "wherein the published search engine compares..." is not a positively recited step and is therefore intended use. (MPEP 2114; In re Swineheart, 169 USPQ 226; In re Schreiber, 44 USPQ2d 1429 (Fed. Cir. 1997))

#### ***Claim Rejections - 35 USC § 101***

Claims 1-2, 4,5 and 29-34 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-2, 4,5 and 29-34 are rejected based on Supreme Court precedent (See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject

matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed. In this particular case, claim 1 fails prong (1) because the “tie” (e.g. UDDI registry, and an external matching service) is representative of extra-solution activity. Additionally, the claim(s) fail prong (2) because the method steps do not transform the underlying subject matter to a different state or thing.

Claims 2, 4,5 and 29 are dependant upon claim 1 and are rejected for at least he same reason.

6. Claims 30-34 are “software per se” the claimed “structure” of the invention is composed entirely of software (e.g. module, interface) and as such is non-statutory.
7. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data

structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. (MPEP 2106.01 --FUNCTIONAL DESCRIPTIVE MATERIAL: "DATA STRUCTURES")

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-2, 4,5 and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nykänen (US Patent 7,155,425) in view of Fletcher et al. (US Patent 6,985,939) and further in view of Zeng et al (US Patent Application Publication 2004/0220910).

9. As per claim 1

Nykänen ('425) discloses a data processing method for a UDDI registry to enable location of details of services which match service requester requirements, the method of the UDDI registry comprising the steps:  
receiving, at a data processing host, a standard UDDI request to locate service details, the request comprising details of a tModel which defines service requirements specified in a

particular language; (Column 7, line 45—column 8 line 42)

locating details of at least one service, the details comprising a tModel which defines service capabilities specified in the particular language; (Column 7, line 45—column 8 line 42)

10. Nykänen ('425) does not explicitly disclose selecting from a plurality of external matching services an external matching service which, itself, comprises an external, published search engine independent of a search engine internal to the UDDI registry, wherein the published search engine compares the service requirements and service capabilities through semantic cues in the UDDI request, wherein each external matching service is accessed through an interface defined in an interface tModel; using the external matching service to filter the located details to find those with indicated service capabilities which match the service requirements; Fletcher et al. ('939) discloses selecting from a plurality of external matching services an external matching service which, itself, comprises an external, published search engine independent of a search engine internal to the UDDI registry, wherein the published search engine compares the service requirements and service capabilities through semantic cues in the UDDI request, wherein each external matching service is accessed through an interface defined in an interface tModel; using the external matching service to filter the located details to find those with indicated service capabilities which match the service requirements; (Column 7, lines 15-54) It would be obvious to one having ordinary skill in the art at the time the invention was made to combine the Nykänen ('425) method with the Fletcher et al. ('939) method in order to optimize the content of a web portal;

11. Nykänen ('425) does not explicitly disclose receiving at a data processing host a request to register a new external matching engine wherein the matching engine implements the interface defined in the interface tModel; wherein the plurality of external matching services includes the new matching engine. Fletcher et al. ('939) discloses receiving at a data processing host a request to register a new external matching engine wherein the matching engine implements the interface defined in the interface tModel; wherein the plurality of external matching services includes the new matching engine. (Column 10, lines 39-60) It would be obvious to one having ordinary skill in the art at the time the invention was made to combine the Nykänen ('425) method with the Fletcher et al. ('939) method in order to optimize the content of a web portal; furthermore the combination of these elements does not alter their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention..
12. Nykänen ('425) does not explicitly disclose comprises an external, published search engine independent of a search engine internal to the UDDI registry, the published search engine is capable of comparing the service requirements and service capabilities through semantic cues in the UDDI request. Zang et al. ('910) discloses comprises an external, published search engine independent of a search engine internal to the UDDI registry, the published search engine is capable of comparing the service requirements and service capabilities through semantic cues in the UDDI request. (Paragraph 26) It would be obvious to one having ordinary skill in the art at the time the invention was made to combine the Nykänen ('425) method with the Zang et al. ('910) method in order to optimize the content of a web portal; furthermore the combination of these elements does not alter their respective



functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention..

13. Claim 29 is not patentably distinct from claim 1 and is rejected for at least the same reasons.

14. Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] " As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted. In regard to claim 1 and 29 the claimed feature of "capable of" imposes no limit upon the scope of the claim.

15. As per claim 2

Nykänen ('425)) discloses the method of claim 1 wherein the standard UDDI request further comprises service requirements specified in a standard UDDI category, the method comprising the further step of:

finding details of at least one service, the details defining service capabilities which match the service requirements specified in a standard UDDI category; wherein the locating step locates details of at least one service from those found by the finding step.(Column 7, line 45—column 8 line 42)

16. As per claim 4

Nykänen ('425)) discloses the method of claim 1 wherein the standard UDDI request is a find\_tModel request (Figure 4B)

17. As per claim 5

Nykänen ('425)) discloses the method of claim 1

Official Notice is taken that "the particular language is one of DAML-S, UML, and WSDL." is common and well known in prior art in reference to object modeling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an object modeling protocol in order to model objects

18. Claims 30-34 are in parallel with the above rejected claims and are rejected for at least the same reason.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. WINTER whose telephone number is (571)272-6713. The examiner can normally be reached on M-F 8:30-6, 1st Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMW

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